



Barriers to Entry and Institutional Evolution

Patri Friedman* and Brad Taylor†

Paper Presented at the Association of Private Enterprise Education Conference
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Abstract:

We argue that the existing literature analyzing competition among governments has neglected the important role of barriers to entry. The dominant neoclassical approach has taken a static view of competition and ignored innovation. More recent Austrian and evolutionary accounts of jurisdictional competition have recognized that competition is a discovery mechanism, but have not sufficiently analyzed the role of the institutional entrepreneur. We take an evolutionary approach and argue that institutional evolution requires low barriers to entry as well as citizen mobility.

1. Introduction

Scholars have long recognized that competition among governments can constrain rulers and lead to superior policy outcomes (Vaubel, 2008). However, following Tiebout (1956), most have taken a static, equilibrium approach to understanding the competitive process. Competition among a fixed population of governments leads to efficiency by reducing the scope for slack in the political system and pushing price down to marginal cost. While this disciplinary feature of the governance market is important, we argue that it is not the only, or even the most important, advantage of competitive government.

Using Austrian and evolutionary theories of competition allows us to see that competition among governments can also foster innovation. The prerequisites of a statically efficient and dynamically efficient market are not identical, however. Established organizations often find it difficult to adjust to changing technological environments and establish routines which reduce the cost of decision-making but also make radical innovations less likely. Whereas static Tiebout competition requires only citizen mobility, evolutionary competition also requires low barriers to entry and low barriers to learning and emulation. In this paper, we focus on low barriers to entry.

In section two, we outline the neoclassical view of competition among governments. In section three we describe the evolutionary approach, argue for its superiority over neoclassical analysis, and make the case that barriers to entry are an important enabling condition of institutional evolution through competition.

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In section four, we outline two historical cases of institutions evolving through the process we describe: ancient Greece and colonial North America. Section five concludes by drawing lessons for practical attempts at reform and suggests areas for further research.

2. Neoclassical analysis of the governance industry

There has been much work in public choice and public finance on competition among governments (Mueller, 2003, chap. 9). The classic work in the industrial organization of the market for governance is Tiebout (1956). Tiebout's paper was a response to the concerns of Musgrave (1939) and Samuelson (1954) that without price signals there is no way for bureaucrats to know what level of public goods to produce. The mechanisms of democracy provided some indication of what people wanted, but the adjustment of government taxation and expenditure to individual preferences was of a very crude nature when compared to the market.

Tiebout turned the conventional approach on its head. It is true that central planners lacked the information required to adjust fiscal policy to anything close to efficiency, but many government decisions are made by local, rather than central, governments. While central governments were destined to search for efficiency with only the very unreliable compass of public opinion, the relationship between individuals and local government was very different. Rather than adapting policy to voter preferences, local governments can keep policy constant and allow consumer-citizens to adopt whichever bundle of services best matches their preferences. If consumers can vote with their feet, local government planners do not face the same information deficit as central government planners. In the limiting case with an infinite number of jurisdictions and completely costless movement among them, everyone would get exactly the bundle of policies and public services they most preferred.

In the real world, of course, there can only be a finite number of jurisdictions and there will remain some cost of switching. As the number of jurisdictions rises and the cost of switching falls, though, we come ever closer to the unattainable ideal of complete economic efficiency in governance. All markets have friction caused by distance,¹ imperfect information, and other factors. Still, compared to the central planner groping in the dark, Tiebout sorting is likely to produce something much closer to the optimum.

The Tiebout model is focused mainly on the *sorting* of individuals into communities which best suit their needs. Competition comes into the picture only when it comes to price: city managers will be constrained by competitive pressures not to levy taxes above the going rate, which will require that the government run efficiently. In this simplified model, governments do not attempt to change the bundle of services they offer in order to attract customers and certainly do not attempt to innovate.

¹ Tiebout (1956, p. 422) suggests that the need to make shopping trips constrains the perfect satisfaction of consumer preferences in the same way costs of moving jurisdiction constrains the satisfaction of political preferences.

Since Tiebout's paper was published, a number of public choice theorists have used its central insight in other areas including competition among states in a federal system and competition among countries (G. Brennan & Buchanan, 1980; Buchanan & Wagner, 1970; Oates, 1972; Sinn, 1992).

There have been many empirical tests of the idea that jurisdictional competition prompts people to vote with their feet and increases efficiency. There is very strong evidence that people vote with their feet. Other things equal, people will flee from high taxes and flock towards high-quality public services. There is also evidence, though not quite as unambiguous as that for fiscally-motivated migration, that a greater geographical concentration of local jurisdictions increases citizen satisfaction with public services (Dowding, John, & Biggs, 1994).

The general disposition of individuals and firms to make location and investment decisions in part based on government policies is not restricted to local governments. In recent years, technology and policy changes have lowered the cost of moving capital around the world, giving investors greater choice of jurisdiction (Ribstein & O'Hara, 2009). There is strong evidence that tax rates affect where firms set up business and where investors send their money (Feld & Heckemeyer, 2009). The evidence that governments respond to this fact by lowering corporate taxes to attract investment is somewhat mixed but generally support modest tax competition (Devereux, Lockwood, & Redoano, 2008; Klemm & Parys, 2009; Griffith & Klemm, 2004; Simmons, 2006; Winner, 2005).²

While the existing literature on competitive government is extremely valuable insofar as it reveals the static advantages of competition, much as the perfect competition model does in ordinary markets, there are limits to the neoclassical approach which have led to a misunderstanding of the real benefits of competitive government.

3. Dynamic Competition

The neoclassical understanding of competition is static. Textbook definitions of perfectly competitive markets require many producers selling homogeneous products to perfectly informed consumers. This ensures that each firm is a price taker and will be unable to earn positive economic profits, driving price down to marginal cost (Mankiw, 2008, chap. 14).

Needless to say, that is not all there is to competition. Most obviously, firms compete not only on price but also on product differentiation. As Schumpeter (1942) points out, competition encourages firms to bring new products to market: competition does not simply optimize the allocation of a given set of

² A weak relationship between competitive pressures and government response would not be surprising from a theoretical point of view, since democracies do not make decisions based on the profit motive. As we will argue below, a more competitive market for governance would allow new types of governments to emerge which would be more responsive to competitive pressures.

goods, but produces new goods. Hayek (1948a) makes the complementary argument that competition is a discovery procedure. It is not simply that firms need to be prodded into providing better services by the threat of losing money, but that competition allows firms to *find out* what consumers want by organizing dispersed knowledge (Hayek, 1945). Competition is a test of hypotheses – an “economic experiment” (Rosenberg, 1992, 1994) – which generates new knowledge and improves the productive capacity of the economy over time.

These ideas have been developed by economists in the Austrian tradition (Kirzner, 1973, 1997; Lachmann, 1976; Littlechild & Owen, 1980) and by economic historians describing the path of technological development (Mokyr, 1992; Rosenberg, 1992, 1994). The idea that competition is a knowledge-generating process has also formed the basis of the new discipline of evolutionary economics, which sees the market process as driven by the Darwinian algorithm of variation-selection-replication. An initial population of ideas, routines, or firms is subjected to market competition and the most successful, as judged by human choice, proliferate through survival and imitation. Over time, producers become better at satisfying consumer needs through a process of trial-and-error learning in which conjectures are tested against the realities of consumer preference and technological feasibility (Dopfer & Potts, 2007; Loasby, 1999; Metcalfe, 1998; Nelson, 1990; Nelson & Winter, 1982; Witt, 1993).

Some thinking about competitive government has taken this dynamic view of competition seriously. Hayek (1948b, p. 268, 1960, pp. 263-264) makes some vague remarks that citizen mobility can promote experimentation in governance. Breton (1987, 1996) recognizes that “entrepreneurial competition” is crucial to a system of competitive federalism, but does not go into much depth about how this process operates. More substantial contributions have been made by Rose-Ackerman (1980), Vihanto (1992), Vanberg and Kerber (1994), Kerber and Vanberg (1995), Gerken (1995), Benson (1995a), Welter (1995), Wohlgemuth (1995, 1999, 2008), Oates (1999), Strumpf (2002), and Stansel (2010).

These analyses generally treat competition among governments as a Hayekian learning process. As in the neoclassical understanding of Tiebout competition, governments have an incentive to attract mobile resources. To achieve this, they will engage in rule innovation and successful conjectures will be imitated, leading to an improvement in rules over time. Variation is generated by existing jurisdictions coming up with new rules, the selection mechanism is consumer choice,³ and replication comes from emulation and learning.

Our approach extends the work of these theorists by looking more closely at the source of variation (entrepreneurial conjectures) and asking how it may be improved. To do this, we consider the governance market as an ordinary market and use the tools of industrial organization to assess its level of competition. We can think of rules as products, governments (as defined by their constitutions) as firms,

³ Vanberg and Kerber (1994) argue that there are many possible selection mechanisms operating on jurisdictions, not all of them beneficial. Military competition, for example, is a powerful selection mechanism but is undesirable from a human point of view.

citizens as consumers, and the totality of all governments in interaction with one another and with citizens as an industry.

It may seem strange to think of governance as a product, citizens as consumers, and governments as producers. Good rules clearly have economic value, however, and there is always some choice in government, at least for those with the resources to emigrate. Governments, like firms, have revenues (taxes) and expenditures (military spending, the wages of bureaucrats, etc) and provide a service (governance) to consumers (citizens). The governance industry certainly has some unusual qualities, but those qualities do not exclude it from conventional economic analysis. Just as traditional public choice uses economics to study individual choice in an unusual arena, we can use the tools of industrial organization to analyze the strategic situation faced by governments as firms.

There are two features of the governance market which currently make it less competitive than other markets: high barriers to entry and high switching costs. Switching costs are the sole focus of neoclassical theories of competitive government, and this focus has been retained by prior evolutionary analyses. As such, we will not discuss them at any length here. In general, high switching costs weaken the selection pressure of competitive choice and slow institutional innovation.

Evolution requires not only an effective selection mechanism, but also a source of variation in the population, just as biological evolution requires mutation before natural selection can work. The evolutionary accounts of competitive government cited above have recognized that variation comes from entrepreneurial conjectures, but have neglected the important role of entry. The barriers to entry for governance ideas are extremely high in democracies. There can be only one idea tested at any time and so there is much costly political competition to have policies implemented: winning an election or convincing a government of the merits of your idea is a costly thing (Wohlgemuth, 1999, 2000).

Moreover, the winner of an election cannot start from scratch in crafting a new system of rules. The winner of an election is highly constrained and can make only small moves in policy space. Policy is highly path-dependent, and established systems will have a number of veto players able to thwart any attempted reform. More generally, as we argue below, changing complex organizations "in place" is extremely difficult. Large-scale political systems are complex, and so the winner of an election cannot simply make any policy or constitutional changes they desire. Even ignoring these problems, Black's theorem tells us that winning platforms will reflect the preferences of the median voter, meaning that each idea tested in a democracy will be one which already has mainstream acceptance.

If we expect to see bold ideas tested, democracy is not enough; it must be easy to set up an entirely new jurisdiction. Unfortunately, the barriers to setting up your own governance provider to compete with incumbents, as an entrepreneur would create a start-up when they see a market opportunity, are even

higher than the barriers to winning an election. In the current geopolitical environment, they are practically infinite.

Standard neoclassical theory does not see entry barriers as important given sufficiently many existing competitors: it makes no difference whether a firm is old or new, it will have the incentive to act competitively in a competitive market. Prior evolutionary analyses of competitive government seem to extend this approach to innovation by assuming that variety at the level of rules can be produced within a fixed population of governments. While some variety surely comes through competition among pre-existing firms, there are good reasons to think that entry barriers are independently important.

First, it is not simply product or policy ideas which are tested by competition, but also organizational forms and governance mechanisms. Just as certain forms of corporate control are better than others in securing shareholder value, certain constitutional features are better than others in producing wise policy. In both cases, reforming the fundamental governance mechanisms of an organization can be difficult. After a corporation has been founded, reassigning rights and obligations will involve high bargaining costs, and history shows us that radical organizational change in business tends to come from new entrants (Hannan & Freeman, 1977, 1984, 1993). When the internet changed the retail book business by removing the scarcity of retail display space, entirely new organizational structures were required. Organizational innovation came from new entrants such as Amazon rather than the reorganization of incumbents such as Barnes & Noble. The problem of reorganization will be even more significant in the market for governance, since constitutions are designed to be enduring. This is desirable given the current structure of the governance industry, but it also means that simply lowering switching costs will not do much to enable organizational experiments.

More generally, existing firms find it hard to reorient themselves strategically and will often be less innovative than new entrants. Firms will develop organizational routines suited to their environment (Nelson & Winter, 1982) and will have trouble breaking out of them when the environment changes (Christensen, 1997; C. Hill & Rothaermel, 2003). The point is not that new firms are more innovative than incumbents but that new firms and incumbents innovate *differently*, responding to different incentives and behaving differently depending on the technological environment (Acs & Audretsch, 1987, 1990; Winter, 1984). Large incumbents can devote large R&D budgets to routine research on well-defined problems, but will be less effective at producing breakthrough ideas which open new markets. This suggests that low barriers to entry will be important in generating the novelty required for institutional evolution to work, and there is good evidence that high rates of entry are correlated with innovation and increases in productive efficiency (Caves, 1998, pp. 1971-1975; Geroski, 1995, p. 431). In the governance market we see anecdotal evidence for this relationship between entry and policy innovation. Radical policy experiments are rare in stable countries and we see more new ideas being tested in new states formed by the breakup of empires. The innovative policy-making of the Baltic countries, including the

introduction of a flat tax and other market-friendly reforms, after they gained independence from the Soviet Union is a good example.

Of course, barriers to entry have benefits as well as costs. Schumpeter (1942) argues that the assumptions of perfect competition would be harmful to innovation. Firms will only attempt to innovate if they can capture the benefits of that innovation in the form of above-normal economic profits. In markets with no barriers to entry, other firms will copy the innovation and rents will be instantly competed away. When it can expect monopoly power for some time following innovation, it has incentive to innovate. Thus, highly competitive markets are statically more efficient than uncompetitive markets but dynamically less efficient.

If it were impossible for new firms to enter, however, the creative destruction of innovation would not happen at all, since there would be few economic experiments. This creates an offsetting benefit of competition, or more specifically low barriers to entry, in terms of innovation. This suggests that there will be a sweet spot between too much and too little competition when it comes to encouraging innovation. With no barriers to entry, there is no incentive to innovate; with infinite entry barriers, there is no ability to innovate. The empirical record on industry structure and innovation is somewhat ambiguous. There seems to be an inverted-U relationship between competition and innovation at the firm level, but this does not seem to flow through to the industry level. More competitive industries do seem to be more innovative (Gilbert, 2006).

The rents accruing to an innovating firm can in some cases be protected without high barriers to entry, however. If barriers to imitation are significant, innovation can give a firm a sustained competitive advantage even when new entrants can enter the market costlessly (Porter, 1985). Tacit knowledge and local learning effects present natural barriers to imitation of complex organizational technologies (Barney, 1991; Maskell & Malmberg, 1999; Porter, 1985; Reed & DeFillippi, 1990; Rivkin, 2000), and therefore naturally protect the rents accruing to entrepreneurs, at least in the short run. Since governance is a complex organizational technology, barriers to imitation are likely to be high.⁴

We suspect, but will not attempt to establish here, that most industries would be more innovative given lower barriers to entry. What seems quite clear, however, is that the governance industry is far less competitive than the "sweet spot", and so lower barriers would result in greater static and dynamic

⁴ Barriers to imitation will increase the generation of novelty through this incentive effect. On the other hand, barriers to imitation reduce the capacity of competing firms to learn from one another and thus slow institutional evolution. We make no claim here as to which effect dominates, and our point is simply that government in fact has reasonably high barriers to imitation and that barriers to entry are therefore relatively undesirable.

efficiency. High barriers to imitation in this industry decrease the benefit of barriers to entry relative to other industries, but they are orders of magnitude higher than that of any other industry.⁵

4. Historical Examples

Our argument is that both switching costs and barriers to entry are important to institutional innovation. Many historical case studies demonstrate that decentralized systems with low switching costs produce innovations in governance (Bell, 1991; Benson, 1990, 1991; Berman, 1983; van Notten, 2005; Stringham & Zywicki, 2011; Taylor, 2010, pp. 7-9; Zywicki, 2003). The question of whether low barriers to entry have a similar effect has not received similar attention.

One reason for this is that people intuitively see government as necessarily having high barriers to entry – starting your own country seems like a crazy idea. While entering the governance market is never likely to be as easy as starting a web design firm, we can see from history that there is significant variation in barriers to entry. Another reason for the neglect may be that the distinction between switching costs and barriers to entry is not nearly so important in many historical cases. The reasons for inertia in government are fundamentally organizational – a formal organization such as an established state or firm is not well equipped to radically alter its routines. This issue does not arise in a decentralized system of law, since the legal system is not controlled by any single organization. If individuals can act as institutional entrepreneurs within a given legal system, there is an internal source of variation and the ability to start an entirely new system is not nearly so essential to institutional evolution. The customary systems of law described by Benson (1990, 1991) and the English common law described by Stringham and Zywicki (2011; Zywicki, 2003) are good examples of systems with the ability to generate novelty internally.

With the rise of the modern state and the centralization of power (Tilly, 1990), the ability of legal systems to generate novelty from within was seriously reduced. States-as-organizations replaced decentralized legal systems and the barriers to trying out new ideas increased drastically. Democracies allow some competition for ideas about governance in an ex ante sense – candidates propose alternative ways of governing and voters choose among them – but, in addition to the very serious problems with democracy pointed out by public choice theorists, only one policy option is ever tried at a time. Rather than a series of parallel experiments, we have a series of serial experiments. While this competition *for* government may be better than no competition at all, it seriously limits the generation of novelty when compared to competition *among* governments. As such, we can expect the rate of evolution to be much slower (Wohlgemuth, 1995, 1999).

To see the power of starting new jurisdictions, we need to states-as-organizations existing before the rise of the national state or to frontier. We here offer one example of each.

⁵ The argument of Olson (1982) is interesting to consider from this perspective. The accumulation of special interests with an incentive to resist reform can be seen as just another form of organizational inertia. Given the high costs in terms of human welfare of dismantling a government, this has particularly harmful consequences.

4.1. The Ancient Greek City State Culture

An interesting case study in institutional evolution is the ancient Greek city state culture. Our theory implies that city state cultures – that is, areas connected by a common language and culture but divided politically into a number of small states governing a city and its hinterland (Hansen, 2006, p. 9) – would be more conducive to institutional evolution than national states. Politically more fragmented cultures, other things equal, produce more variation in political and legal institutions, while a common language and culture increase mobility and allow information to flow more smoothly across political boundaries, facilitating selection and learning respectively.

The Greek city state culture, however, seems particularly conducive to institutional innovation. Variation, selection, and learning were all very high in ancient Hellas, even relative to other city state cultures. This highly competitive political ecosystem produced a number of lasting innovations, most notably democracy and federalism.

The Greek city state culture was by far the largest to have existed. The Greek city state culture consisted of some 1500 self-governing (but not always entirely independent) cities stretching far beyond Hellas itself. Greek *poleis* could be found from Spain to Afghanistan, and from the Ukraine to Libya. At any one time, there were around 1000 *poleis* scattered around the Mediterranean and Black seas, as Plato puts it, “like frogs around a pond.” During the fourth century BC, the total population of these *poleis* was probably at least 7.5 million (Hansen, 2006, pp. 31-38).

By some reckonings, the city-state culture lasted around 1200 years, only dying out in the sixth century AD (Hansen, 2000, 2006). Since almost all of the 1500 *poleis* estimated to have existed during these those 1200 years were founded in the period 750-200 BC (Hansen, 2000, p. 141), however, our discussion will focus on this narrower period.

In addition to the variety coming from sheer numbers, the Greek political ecosystem produced novelty through colonization. *Poleis* were being born continuously from the eighth through the third centuries BC. Upon founding, each colony (as opposed to simple trading outposts) would be an independent *polis* with its own laws and constitution, and a colony would often later send out their own colonies. While the *polis*-as-state would often be behind colonization, this was not always the case. Some colonization efforts were undertaken by groups of individuals without any formal sanction. There were two significant waves of colonization: from 750-500 BC, many colonies were founded in the Mediterranean and Pontic regions, and from 331-200 BC, as many Greek colonies were founded in the former Persian Empire following the victory of Alexander the Great over Darius III (Graham, 1964, 2001; Hansen, 2006, 5; Tsetskhladze, 2008).

This colonization generated the variety required for institutional evolution. Indeed, the spawning of new colonies is closely analogous to a-sexual biological reproduction. When a *polis* spawns a colony, it makes a

copy of itself. The copying procedure is imperfect, however, and mutations can lead to evolution. Of course, unlike biological evolution, the variation here is not random. Those founding colonies would have chosen institutions based on how well they expected them to work. This, as in economic evolution more generally, leads to faster evolution than the blind processes of biology.

The Greek city state system was highly competitive, and each *polis* faced a genuine risk of being eliminated through desertion or conquest. Rival *poleis* were forced to compete for territory, residents, prestige, and economic power. Some of this competition took the form of outright conquest or coerced assimilation, while at other times competition was peaceful and positive-sum. In addition to building an empire, for example, Athens attempted to attract residents peacefully (Ober, 2008, pp. 80-84).

Inter-*polis* kinship ties meant that most citizens had the opportunity to join some other *polis* and have a fairly broad range of rights respected. One mechanism facilitating this mobility was the *koinon* – federations of *poleis*. *Koina* served a variety of economic, political, and cultural purposes and guaranteed citizens of a member *polis* rights in other member *poleis*, such the ability to own property as a non-citizen and to marry into the *polis* (Mackil, 2003).

More generally, Greeks in Hellas and elsewhere shared a common language, culture, and identity which made migration among *poleis* possible. Despite much competition among *poleis*, Athenians saw Spartans as fellow Greeks and superior to the barbarians. A common language with remarkably little variation, an imagined common origin, common customs and beliefs, and frequent inter-*polis* contact for trade and pan-Hellenic festivals⁶ ensured that Greeks, even those far away from Greece proper, felt like Greeks (Hansen, 2006, chap. 4).

The cultural similarity among Greeks and the rights and obligations among *poleis* made the Greek a relatively footloose people. As Hansen (2006, p. 34) puts it, the Greeks were “unbelievably mobile and unbelievably easy-going about letting strangers settle in their cities.” This mobility and willingness to absorb outsiders made individual choice of location a selection mechanism. Those *poleis* which were attractive places to live grew in population, while those which were not dwindled.

Further, the possibility of *polis* death produced another mechanism through which successful *poleis* could grow. When a *polis* died due to internal “weakness” or some external shock, its land and population would generally be divided neighbouring *poleis*. The people subject to such redistribution were often quite happy with this, and the decentralized nature of the city state system made the system as a whole resilient even as its constituent elements were fragile (Mackil, 2004).

⁶ While the Greek world covered a very large area, making land travel and communication costly, the fact that most *poleis* were crowded around the water’s edge brought them closer together in practice (Hansen, 2006, p. 34). As Scott (2009) points out, navigable water is distance-destroying.

Colonization, as discussed above, also works as a selection mechanism. Since successful *poleis* were more likely to be able to found colonies and daughter colonies would likely take many of the institutions of the *metropolis* (mother city), good ideas would tend to spread.

We thus have at least four selection mechanisms: conquest, migration, voluntary assimilation, and colonization. While the consequences of military competition on governance quality are not clear, since those institutions facilitating the projection of military power are seldom those which best meet citizen needs, the other three tend to encourage innovations which increase citizen welfare. In the heyday of the *polis*, conquest seems to have been a less important factor than the other three, and so we could expect governance innovations to be welfare-enhancing.

The same factors which facilitate the mobility of people – frequent contact, interstate cooperation, cultural similarity – also facilitate the flow of information. Freely-flowing information meant that *poleis* could learn from each other relatively easily, and beneficial governance innovations could therefore be copied more easily than would otherwise be the case (Ober, 2010, p. 277).

Cultural similarity may have facilitated learning through an additional channel. Formal institutions do not exist in a vacuum, but depend for their effectiveness on informal institutions. As the failure of development efforts in the Third World has shown, it is not generally possible to take an institution which works in one place and successfully transplant it into an alien environment. “Sticky” institutions generally need to be indigenous (Boettke, Coyne, & Leeson, 2008). The common Greek culture would have gone some way towards solving this problem and reducing the costs of institutional transfer. While regional differences in informal institutions did, no doubt, exist, these differences were relatively minor. Exotic institutions, then, would not have been entirely alien.

Thus, the Greek city state ecosystem exhibited all three requirements for institutional evolution to a high degree. With such a rich source of institutional variation, many governance ideas were sure to be tried. The competitive environment meant that if any of these institutions conferred an advantage on a *polis*, they would prosper relative to their rivals. Once that prosperity became evident, the ease of information flow and institutional transfer ensured that others would know about it and were ready to emulate.

The most celebrated innovation of ancient Greece was democracy. Scholars have typically focused on Athens to the neglect of other Greek *poleis*. This is understandable, since surviving documentary evidence is biased towards Athens, and it was indeed an exemplary case of democracy.

As Ober (2008) argues, Athenian democracy was, relative to alternative systems at the time, a very effective system of making wise collective decisions. The Athenian system was ingenious in many respects, anticipating many findings in the social sciences. Democracy in general was at the time often maligned as leaving governance to the incompetent masses. In this respect, the practice of democracy downplayed the role of experts and sought to aggregate the dispersed knowledge of many individuals, the

importance of which would later be described by Hayek (1945) and others (Ober, 2008, chap. 1). The selection of representatives by lottery anticipated the argument of Mueller et al (1972) that randomly selecting representatives does a better job than current democratic practice of aggregating preferences while avoiding the problems of rational ignorance. The structure Athenian political institutions such as the Council of 500 anticipated findings in modern network theory, creating bridging ties between otherwise isolated groups to facilitate the flow of information (Ober, 2008, pp. 142-151).

Athens had a very good political system, and the result was an unusually prosperous society by the standards of the time. Classical Greece in general was wealthy compared to other regions and preceding periods, and Athens in particular stood above other *poleis* (Ober, 2008, 2010). Nevertheless, the Athenian system of democracy was not created ex nihilo in the fifth century B.C. Athens learned from other *poleis*, some of which began exhibiting democratic features as early as the seventh century B.C. (O'Neil, 1995; Raaflaub, Ober, & Wallace, 2007; Robinson, 1997), and in turn taught others.

While Athenian statesmen managed to put together a remarkable system, it was the political ecosystem in which they existed which enabled them to do so.

Institutional innovation worked not only to improve the internal institutional arrangements of Greek *poleis*, but also their ability to coordinate at an inter-*polis* level. Competition is a crucial element to evolution, but this can produce a great deal of cooperation. Like biological evolution forced humans to adopt a cooperative strategy in order to maximize their individual fitness (Axelrod, 1984), so institutional evolution forced Greek *poleis* to compete through cooperation. Competition forces and enables organizations to be rational, and rationality often requires cooperation.

The most important institution facilitating this cooperation was the *koinon*, mentioned above with regard to its effect on mobility. *Koina* served a number of economic and political purposes. They facilitated trade by increasing intra-*koinon* mobility and issuing standardized coins, cooperated militarily by producing regional public goods such as garrisons and sanctuaries, and obliged other *poleis* to help in times of crisis (Mackil, 2003, 2004, 2008, 2010; Mackil & van Alfen, 2006). More generally, *poleis* seemed quite able to cooperate at a variety of levels, ranging from the formalized rights and obligations of the *koinon* to looser bilateral arrangements (Mackil, 2010; Mackil & van Alfen, 2006, p. 235). While this cooperation produced political institutions and organizations above that of the *poleis*, and the *koinon* has justifiably been characterized as a “federal state” (Larsen, 1968), it emerged from the bottom-up interaction of *poleis* responding to their own needs rather than being imposed upon them from the centre, though there were surely coercive elements at times (Mackil, 2010).

Ancient Greece shows that institutional competition can act as a discovery mechanism. Just as decentralized economic experiments is a process of knowledge accumulation, so political experimentation constrained by citizen choice and spread by institutional transfer improves the technology of governance over time. As with other technologies (Mokyr, 1992), political innovation combined major breakthroughs

with minor improvements. This led not only to clever new ways of governing, but refined systems which performed extremely well.

4.2. The American Frontier

Another example of decentralized experimentation in government coming from low barriers to entry is Colonial America. Anderson and Hill (1979, 2004) have shown that decentralized experimentation on the Western frontier produced many innovative solutions to collective action problems – including new forms of property rights and enforcement mechanisms – without the need for central government involvement. We would suggest that low barriers to entry were fundamental to the vibrancy of governance on the Western frontier, but will here focus on the settlement of Eastern North America in the seventeenth and eighteenth centuries. While imperial authorities were often involved quite heavily in this settlement, the process through which governance units were formed was decentralized, and barriers to entry were low.

The American Experiment as whole can be seen as single new entrant in the global market for governance. Looking at it this way does tend to support out theory: ideas about representative democracy, constitutionalism, and republicanism were tested, proved successful, and were imported back to the Old World. More importantly, though, the new world presenting a vast open space for decentralized political experimentation. Settlers had access to the results of past experiments in the Old World but were, as Zuckerman (1970, p. 6) puts it “[u]ncumbered by the institutional complexities of accumulated centuries.” The American experiment was not a single experiment, but a series of parallel experiments at multiple levels of organization. We here focus on the experience of British North America, though admit that investigation of other cases may also be revealing.

The English (and later British) Crown granted colonies a great degree of autonomy. Some were administered by agents of the Crown, while others were governed by chartered companies or individual proprietors with the freedom to set their own rules. Land was abundant and people were scarce, meaning that governors needed to attract residents if their colony was to succeed and prosper. In many cases, governors had a direct financial incentive to attract migrants (Greene, 1988, 1994; Osgood, 1904). Americans were well-positioned to move to greener pastures, being an unusually mobile people (Ferrie, 2006). More importantly for our argument, new governments were established remarkably easily relative to the situation in the old world. While independent colonies required the permission of the Crown, this was granted relatively freely during the seventeenth century. The English Crown was building an empire, and proprietary and corporate colonies provided a leveraged way of doing so (Osgood, 1904, p. 3). This provided those with ideas about how a society should be run to test them against reality, and this opportunity was seized by both profit-motivated entrepreneurs and ideologically-driven utopians (Doherty, 1999).

Starting a colony, of course, was an expensive and risky undertaking, but compared to the situation in the Old World, barriers to entry into the governance market of the New World were extremely low. Entrepreneurs and idealists from England had the opportunity to enter the governance market, and those living in these new colonies could use the abundant space of North America to start their own colony. Some would seek a royal charter in order to protect their autonomy against annexation, while others took their chances in the open space and created de facto colonies without royal consent.

As the population of colonies grew and dispersed, their political importance diminished relative to towns. A small, compact colony could meaningfully be called a political community; a large, dispersed one could not. By the Eighteenth century, towns in the Northeast had become relatively autonomous (Lockridge & Kreider, 1966; Zuckerman, 1970). Founding a town, while still expensive and risky, was easier than founding a colony, and many founded towns in the hope of securing profits. As was the case with colonies, town founders had a strong incentive to attract settlers, and the mobility of those settlers made crafting good rules important (Martin, 1991). Towns were founded not only by profit-seeking entrepreneurs, but also idealists and groups of individuals forming a covenant among themselves for mutual protection in the harsh frontier environment (Schechter, 1980).

Moreover, the formal governments of towns and colonies did not have an effective monopoly of law. Like the decentralized system which had earlier prevailed in Europe (Berman, 1983), colonists generally had a variety of venues in which they could settle disputes. The government of the colonies was one venue. The government of the town was another. In addition, churches heard cases regarding secular matters such as breach of contract or fraud. In the puritan settlements of Massachusetts, the legal role of the church seems to have continued until the early nineteenth century (Auerbach, 1984, pp. 21-25). Private arbitration was also common in colonial America, as exchange created the need for a means of settling commercial disputes (Benson, 1989, 1995b). “The result”, according to Auerbach (1983, p. 28), “was a patchwork pattern of non-legal dispute resolution systems, some religious and others secular, scattered throughout the colonies.”

In short, the situation in British North America during the seventeenth and eighteenth centuries was particularly conducive to institutional evolution: both switching costs and barriers to entry were low. The low barriers to entry do seem to have generated a lot of variety. While English law and custom formed the basis of legal institutions in the British colonies, certain aspects of that rich and diverse legal tradition were variously emphasized or suppressed. There was thus significant variation among colonies (Konig, 2008). When we also consider the influence of other legal traditions, most notably the Dutch system, and the various religious cultures ranging from Puritans to Quakers (Auerbach, 1984, chap. 1), we can see that there was a rich source of variety upon which the selection mechanism of individual choice could operate.

As our theoretical argument above would predict, colonial North America was an exceptionally innovative political culture. Institutional entrepreneurs on the frontier selectively imported some aspects

of European legal and political traditions. They copied, modified, discarded, and invented (Billias, 1965). Each combination of old and new was forced to compete with its contemporaries for mobile settlers. This not only constrained rulers, but also produced a number of lasting institutional innovations. Beginning in the East and spreading westward over time, we saw the knowledge generating process of economic evolution working to improve institutions. As Frederick Jackson Turner (1920, pp. 2-3) puts it:

Limiting our attention to the Atlantic coast, we have the familiar phenomenon of the evolution of institutions in a limited area, such as the rise of representative government; the differentiation of simple colonial governments into complex organs; the progress from primitive industrial society, without division of labor, up to manufacturing civilization. But we have in addition to this a recurrence of the process of evolution in each western area reached in the process of expansion. Thus American development has exhibited not merely advance along a single line, but a return to primitive conditions on a continually advancing frontier line, and a new development for that area. American social development has been continually beginning over again on the frontier. This perennial rebirth, this fluidity of American life, this expansion westward with its new opportunities, its continuous touch with the simplicity of primitive society, furnish the forces dominating American character.

One interesting case of institutional evolution is the emergence of religious liberty. In England, as in the rest of the Old World, church and state were one and the same, and those who dared to leave the church and start their own were often harassed and arrested. This caused problems for those with unorthodox religious views like the Puritans, who saw the Church of England as corrupted by Catholic ritual. Wanting a more pure form of Christianity but prevented from having it by religious monopoly, many puritans went to the new world to found puritan colonies. In 1630, John Winthrop led a fleet of eleven ships and 700 puritans to form the Massachusetts Bay colony as a "city upon a hill" where puritans could practice their faith openly. Over the next decade, around 20,000 more puritans would settle New England and form various colonies (Doherty, 1999).

While the puritans were searching for the freedom to practice their own form of religion, they were by no means advocates of general religious liberty. To them, religious freedom meant being able to suppress internal dissent in order to maintain their faith. In the old world, such a group's rise to dominance would lead to harsh repression of others - one tyranny would have replaced another. But the New World had one thing the Old World lacked: a frontier. When people became dissatisfied with the religious status quo in the Puritan colonies, they could pack up and leave. The pioneers of religious freedom criticized by creating.

One of the first such pioneers was Roger Williams. As an unorthodox Puritan preacher in the Massachusetts Bay colony, Williams argued for religious liberty and a "wall of separation" between church and state. Unsurprisingly, this did not go down well with the church, and Williams was ejected from the colony. He made a home for himself in Providence and started the colony which would later become Rhode Island as a sanctuary for the persecuted, welcoming those of all faiths and maintaining a strict separation of church and state (Eberle, 1998; Hall, 1998). Another important figure in the history of

religious freedom is Quaker William Penn, who had been subject to much persecution in England, including unfair trials which put him in jail. He founded Pennsylvania with a constitution guaranteeing freedom of religion and thought, as well as a right to due process and other innovations. Other Quaker colonies followed and these experiments proved successful, allowing the founding fathers to institute them in the US constitution as the first amendment (Adams & Emmerich, 1990; Hughes, 1965, 2).

Religious liberty was an idea floating around in the Old World, but there was no means to try it out in reality without the frontier. Williams and Penn used the open space to test their ideas. They proved successful, were later included as a basic element of the United States Federal Government and now form one of the basic elements of democratic government across the globe. We thus have multiple levels of knowledge accumulation through competition: competition among towns and colonies influencing the behaviour of one another and later the national government, and that national government influencing other national governments. What we saw in this case was variation (colonies with various levels of religious liberty), selection (migration from other colonies and from the Old World), and replication (imitation by new colonies and eventually the new US federal government and Old World governments).

We see a similar dynamic at play in other aspects of American institutional structure. Various towns and colonies experimented with diverse forms of representative government. Over time, this diversity was removed as jurisdictions learned from one another and a unique American model of representative democracy emerged. Like religious liberty, variations of this system were later adopted by governments in the Old World and elsewhere (Kammen, 1969). American political institutions – the compound republic, town hall democracy, religious liberty – resulted from a long series of parallel experiments on the frontier. The federal system embodied in the Constitution was a significant improvement over the political systems which prevailed in the Old World and has served as a model for new and reforming nations since that time (Blaustein, 1987; W. J. J. Brennan, 1991).

The drafting of the United States constitution also reveals the power of learning in institutional evolution. Both democracy (e.g. *Federalist* 63) and federalism (e.g. *Federalist* 18) as experienced in ancient Hellas were in the minds of those drafting the Constitution of the United States. The founding fathers admired some aspects of Greek political institutions and criticized others. By learning from past experience, they crafted their own innovative political system which would in turn become strongly influential on others. While modern democracy is not a direct descendent of ancient democracy in a straightforward sense, the fact that a long-dead form of government can have an influence confirms Kevin Kelly's (2010) point that technologies, social or otherwise, never go extinct. When a species dies out, the knowledge accumulated over countless generations of evolution is lost to the world. When future organisms need to solve similar problems, they are forced to start the whole process of trial and error from the beginning: the giraffe did not copy its long neck from the brontosaurus. The ability to learn from the successes and mistakes of those other than our direct ancestors gives economic and institutional evolution a powerful advantage over the blind forces of biology.

5. Conclusion

A more competitive market for governance would improve outcomes in a number of ways. First, it would give rulers the incentive to provide good policy at the lowest possible price (in terms of taxes). Second, it would allow citizens to sort themselves into polities better catering to their own policy preferences. Third, and we argue most importantly, it would allow small-scale experimentation and innovation which would improve the quality of governance over time.

Whereas standard neoclassical welfare economics takes the allocation of a fixed pool of resources as the normative criterion by which to judge alternative institutional arrangements, a more suitable method would be to take into account the power of innovation. For example, a perfectly efficient allocation of resources given nineteenth century productive capacity would, we suggest, be normatively inferior to an inefficient allocation of resources given current productive capacity (Holcombe, 2009).

When we apply the insights of Austrian and evolutionary economics to competition among governments, we see a similar shortcoming in the standard normative conclusions of the public choice and public finance literatures. The literature on fiscal federalism, for example, attempts to define the efficient level of decentralization based on static concerns (Musgrave, 1959; Oates, 1972).⁷ Once we consider dynamic efficiency, however, we may consider systems which are optimally decentralized from a static perspective to be too centralized.

Moreover, the importance of barriers to entry means that not all decentralized systems are equally conducive to institutional evolution. The inertia of established organizations means that even a highly competitive system of fixed jurisdictions would be less innovative than a system which allowed entry. Simple decentralization of government, then, might be effective in promoting static efficiency, but their capacity to promote innovation will be much more limited. There are a number of proposals which explicitly or implicitly recognize the importance of barriers to entry and propose solutions which would make government more innovative (Friedman & Taylor, 2011; Heath, 1957; Kling, 2009, 2011, pp. 101-105; MacCallum, 1970; Nelson, 2005; Romer, 2010; Strong & Himer, 2009).

The emerging evolutionary approach to competition among governments promises to increase our understanding of institutional change and provide more plausible mechanisms of improving the quality of governance. Much more theoretical and empirical work is required, however. Evolution in general is a three stage process of variation-selection-replication. The selection stage has been studied by neoclassical theorists of competitive government, and we have here made an attempt to emphasize variation. A full understanding of evolutionary competitive government, however, requires that we look at all three features together and carefully specify the unit of selection, the various selection mechanisms at work, and the mechanisms through which good ideas are diffused through the population.

⁷ Though Oates (1999) does discuss innovation.

All evolutionary processes are messy and unpredictable, and disentangling the many competing forces will require careful empirical study. We used the examples of ancient Greece and the American frontier to illustrate the logic of our argument, but comparative study of such cases will be required if we are to find robust evidence that barriers to entry are a crucial ingredient in institutional evolution.

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